

We claim:

1. A highly weather-resistant iron-based magnet powder comprising a rare-earth element, wherein particles of said magnet powder comprise uniform coating with a phosphate film to a thickness of 5 to 100nm on the average.

2. The highly weather-resistant magnet powder according to Claim 1, wherein said iron-based magnet powder comprising a rare earth element is an alloy powder selected from the group consisting of Nd-Fe-B-based and Sm-Fe-N-based powder.

3. The highly weather-resistant magnet powder according to Claim 2, wherein the particles of said Sm-Fe-N-based alloy powder are uniformly coated with a zinc film.

4. The highly weather-resistant magnet powder according to Claim 1, wherein said phosphate coating film is a composite composed of iron phosphate and another phosphate and comprises iron phosphate in an Fe/rare earth element ratio of 8 or more.

5. A resin composition for bonded magnets, comprising, as the main ingredient, the highly weather-resistant magnet powder comprising a rare-earth element, wherein particles of said magnet powder comprise uniform coating with a phosphate film to a thickness of 5 to 100nm on the average.

6. The resin composition for bonded magnets according to Claim 5, wherein said iron-based magnet powder comprising a rare earth element is an alloy powder selected from the group consisting of Nd-Fe-B-based and Sm-Fe-N-based powder.

7. The resin composition for bonded magnets according to Claim 6, wherein the particles of said Sm-Fe-N-based alloy powder are uniformly coated with a zinc film.

8. The resin composition for bonded magnets according to Claim 5, wherein said phosphate coating film is a composite composed of iron phosphate and another phosphate and comprises iron phosphate in an Fe/rare earth element ratio of 8 or more.

9. The highly weather-resistant iron-based magnet powder according to claim 1, wherein the magnet powder is formed as a compacted magnet by compacting the highly weather-resistant magnet powder to an apparent density of 85% or more of the intrinsic density.

10. The highly weather-resistant iron-based magnet powder according to claim 1, wherein the magnet powder is formed as a compacted magnet by compacting the highly weather-resistant magnet powder to an apparent density of 85% or more of the intrinsic density.

11. The highly weather-resistant iron-based magnet powder according to claim 1, wherein the magnet powder is formed into a compacted magnet by compacting the highly weather-resistant magnet powder to an apparent density of 85% or more of the intrinsic density.

12. The highly weather-resistant iron-based magnet powder according to claim 1, wherein the magnet powder is formed as a compacted magnet by compacting the highly weather-resistant magnet powder to an apparent density of 85% or more of the intrinsic density.

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